REMARKS

Claims 1-5, 7-11, 13-24, 26-31 and 33 are pending in this application. Claims 24, 26 and 28-31 are currently withdrawn. By this Amendment, claims 1 and 24 are amended to conform to U.S. claim practice and/or for readability. Claims 7-11, 15 and 26 are amended for antecedent basis. New claim 33 is amended and is supported by original claims 1, 6 and 12 and by page 15, lines 1-15 of the original specification. Claim 6 is canceled. No new matter is added by this Amendment.

I. Interview

The courtesies extended to Applicants' representative by Examiner Baumstein at the interview held July 13, 2010, are appreciated. The reasons presented at the interview as warranting favorable action are incorporated into the remarks below, which constitute Applicants' record of the interview.

II. Rejections Under 35 U.S.C. §103(a)

A. Claims 1-11, 13-17, 19-23 And 27

Claims 1-11, 13-17, 19-23 and 27 were rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over U.S. Patent No. 6,740,192 ("Lu") in view of U.S. Patent No. 3,148,167 ("Keplinger") and in further view of U.S. Patent No. 4,486,556 ("Kordomenos") and U.S. Patent Application Pub. No. 2002/0007003 ("Merz"). Applicants respectfully traverse this rejection.

In the Office Action, the Patent Office admits that Lu does not describe the structural elements of formula (IV) of the Y_1 moiety of the at least one polymer B, as recited in the present claims and thus introduces Keplinger as allegedly disclosing this feature. For the reasons discussed below (and during the interview), Applicants respectfully disagree.

As admitted by Examiner Baumstein during the interview, Lu or Keplinger do not describe that the Y_1 moiety of the at least one polymer **B** simultaneously has the structural elements of the formulae (IV) and (V)

(IV)

(V)
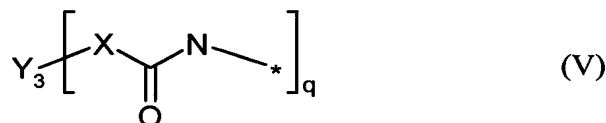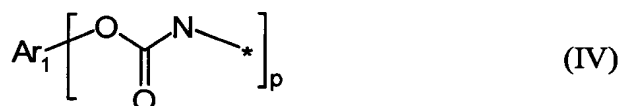
in which p is 2, 3 or 4; q is 2, 3 or 4; X is S, O or NH; <u>Ar_1 is a p-valent, optionally substituted, aromatic moiety, wherein the aromatic moiety is directly bound to the urethane groups;</u> Y_3 is a q-valent moeity of an isocyanate-reactive polymer after removal of the terminal amino, thiol or hydroxyl groups; and * is the linkage point to the remainder of the polyurethane prepolymer, as recited in claim 1.

In other words, as discussed during the interview, amended claim 1 recites that the Y_1 n-valent moiety of the polyurethane prepolymer B has a structural unit comprised of a "p-valent aryl moiety" (Ar_1 of Formula (IV)) <u>directly bound</u> via urethane groups.

Furthermore, because n in Formula (I) is 2, 3 or 4, the Y_1 moiety is present in the backbone of the polyurethane prepolymer. To further illustrate this point, and in accordance with Examiner Baumstein's suggestion, Applicants have included a representative reaction diagram of Example B-01 of the present specification. As shown on page 3 of the reaction diagram, the Y_1 moiety is present in the backbone of the polyurethane prepolymer and has a structural unit comprised of a "p-valent aryl moiety" directly bound via urethane groups.

Keplinger merely describes a polyurethane composition comprised of a polyurethane elastomer and a diepoxide compound, such as diglycidyl ether of bisphenol A. See Office Action, page 4 (citing Keplinger, col. 1, line 58 to page 2, line 3). However, the diglycidyl

ether of a bisphenol A does not have a reactive group that is capable of reacting with an isocyanate group and thus would not form the polyurethane prepolymer recited in claim 1.

Kordomenos and Merz do not remedy the deficiencies of Lu and Keplinger. Kordomenos was introduced as allegedly describing the reaction of product of the epoxide adduct (A), and Merz was introduced as allegedly describing a thixotropic agent. However, neither Kordomenos nor Merz describe the structural element of Formula (IV) in claim 1.
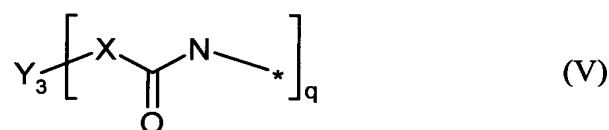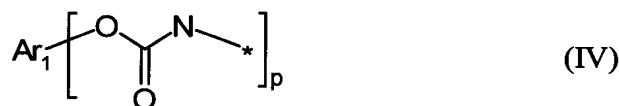
Furthermore, Kordomenos does not describe the epoxide adduct **A**, as recited in claim 1. Kordomenos describes an epoxy ester resin that is the reaction product of a diepoxide with a diphenol, dicarboxylic acid and fatty acid. See Kordomenos, col. 2, lines 59-65. The diphenol and dicarboxylic acid function as chain extenders, while the fatty acid functions as a chain terminator. Depending on the stoichiometry of these three compounds, the epoxy ester resin will either have (1) carboxylic end groups (from the dicarboxylic acid), (2) phenol end groups (from the diphenol) or (3) alkyl end groups (from the fatty acid). However, Kordomenos describes that the epoxy ester resin is substantially phenol terminated. See Kordomenos, col. 12, lines 61-62. Kordomenos thus does not describe an epoxide adduct **A** having on average more than one epoxide group per molecule, as recited in claim 1.

As such, Kordomenos and Merz alone or in combination with Lu and Keplinger would not have provided one of ordinary skill in the art with any reason or rationale to have produced polymer **B** of claim 1.

B.   Claim 18

Claim 18 was rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Lu in view Keplinger, in further view of Kordomenos and Merz, and in further view of WO 02/48235 ("Kaji"). The Patent Office relied upon U.S. Patent No. 6,903,180 as an English-language equivalent of Kaji. Applicants respectfully traverse this rejection.

For the above reasons, Lu, Keplinger, Kordomenos and Merz would not have rendered the present claims obvious. Kaji also does not remedy the deficiencies of these references. Kaji was introduced as allegedly describing dicyandiamide as a curing agent. However, Kaji does not describe that the Y_1 moiety of the at least one polymer **B** simultaneously has the structural elements of the formulae (IV) and (V)

$$Ar_1 \left[\begin{array}{c} O \\ \parallel \\ O-C-N- \end{array} * \right]_p \qquad (IV)$$

$$Y_3 \left[\begin{array}{c} X-C-N- \\ \parallel \\ O \end{array} * \right]_q \qquad (V)$$

in which p is 2, 3 or 4; q is 2, 3 or 4; X is S, O or NH; $\underline{Ar_1}$ is a p-valent, optionally substituted, aromatic moiety, wherein the aromatic moiety is directly bound to the urethane groups; Y_3 is a q-valent moeity of an isocyanate-reactive polymer after removal of the terminal amino, thiol or hydroxyl groups; and * is the linkage point to the remainder of the polyurethane prepolymer, as recited in claim 1.

As such, Lu, Kordomenos, Merz, Keplinger and Kaji alone or in combination, would not have provided one of ordinary skill in the art with any reason or rationale to have produced polymer **B** in claim 1.

Withdrawal of the rejection is requested.

C.   Conclusion

In view of the foregoing amendments and arguments, Applicants respectfully request withdrawal of the 35 U.S.C. §103(a) rejections.

III.   New Claim 33

None of the references discussed above describe a composition comprising:

at least one epoxide adduct **A** having on average more than one epoxide group per molecule;
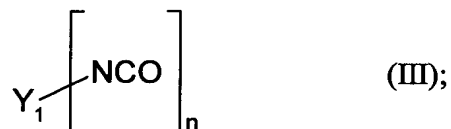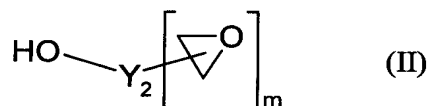
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at least one polymer **B** of the formula (I)

(I)
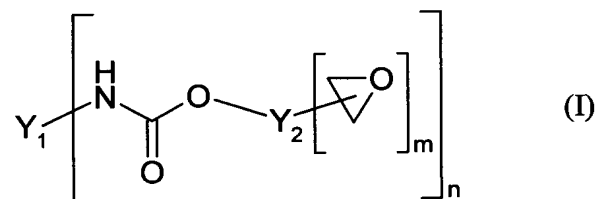
in which: Y_1 is an n-valent moiety of a linear or branched polyurethane prepolymer

terminated with isocyanate groups after removal of the terminal isocyanate groups;

Y_2 is a moiety of an aliphatic, cycloaliphatic, aromatic or araliphatic epoxide containing a

primary or secondary hydroxyl group after removal of the hydroxide and epoxide groups;

n is 2, 3 or 4; m is 1, 2 or 3; and the at least one polymer **B** has at least one aromatic structural

element, which is bound in the polyurethane prepolymer via urethane groups; wherein the Y_1

moiety of the at least one polymer **B** simultaneously has at least structural elements of the
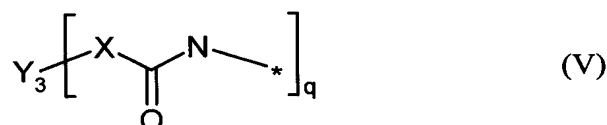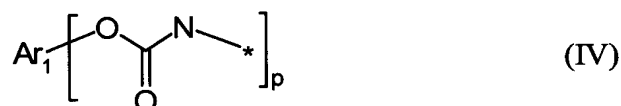
formulae (IV) and (V)

(IV)

(V)

in which: p is 2, 3 or 4; q is 2, 3 or 4; X is S, O or NH; Ar_1 is a p-valent, optionally

substituted, aromatic moiety, wherein the aromatic moiety is directly bound to the urethane

groups; Y_3 is a q-valent moiety of an isocyanate-reactive polymer after removal of the

terminal amino, thiol or hydroxyl groups; and * is the linkage point to the remainder of the

polyurethane prepolymer; and wherein the polymer **B** is obtained from the reaction of a

monohydroxyepoxide of the formula (II) and of a linear or branched polyurethane prepolymer

terminated with isocyanate groups of the formula (III)

$$HO \diagdown Y_2 \left[\diagdown\hspace{-0.3em}\triangledown\hspace{-0.9em}^{O} \right]_m \quad \text{(II)}$$

$$Y_1 \left[NCO \right]_n \quad \text{(III)};$$

at least one thixotropic agent **C** based on a urea derivative in a nondiffusing carrier material;

and at least one curing agent **D** for epoxy resins which is activated by elevated temperature.
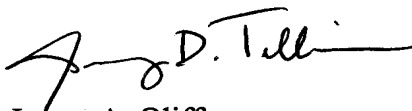
IV.   Rejoinder

In view of the foregoing amendments and arguments, Applicants respectfully request

that upon allowance of claims 1-11, 13-23, 27 and 32, claims 24, 26 and 28-31 be rejoined

with the present application and similarly allowed.

V.   Conclusion

In view of the foregoing, it is respectfully submitted that this application is in

condition for allowance. Favorable reconsideration and prompt allowance of claims 1-5,

7-11, 13-24, 26-31 and 33 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,

James A. Oliff
Registration No. 27,075

Jeremy D. Tillman
Registration No. 62,639

JAO:JDT/hs

Attachment:
    Reaction Diagram

Date: July 14, 2010

OLIFF & BERRIDGE, PLC
P.O. Box 320850
Alexandria, Virginia 22320-4850
Telephone: (703) 836-6400

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